

ABSTRACT OF THE DISCLOSURE

The invention relates to instruments, such as radiometers, which generate a laser beam for striking a target at a distance to assist in aiming the instrument at a selected area of a target. Provision is made for splitting a single beam, used for instance for centering the instrument on the target, into a plurality of beams for creating a pattern or for defining an area on the target. When a single beam is split, the resultant plural beams produced are of relatively lower power, which may be insufficient for visibility on a target at a distance. In a first embodiment the invention provides apparatus to increase the power of the single laser beam when it is split, so as to provide plural beams of appropriately higher power and visibility. In a second embodiment, the invention provides apparatus for attenuating the beam power when a single beam is used, and for removing the attenuation when the beam is split into multiple beams. Apparatus for changing

the single beam of the instrument to multiple beams, and vice versa, has a body structure with a relatively movable carrier incorporating a beam splitter device, and an attenuating or non-attenuating device, such that relative movement of the carrier causes, in a first embodiment, an increase of the laser beam power when only a single beam is used, and in a second embodiment an attenuation of the laser beam power when a relatively higher power single beam is used. In the second embodiment, the relative movement of the carrier serves to actuate switching means controlling the power of the laser beam.

Such apparatus is advantageously in the form of an attachment for engagement releasably on the laser beam instrument.